Building trust in Al through transparency

Philip Weiner

April 2023



bolttech.io C1 — Public



bolitech

Contents

- 01 Introduction
- 02 Al vs Humans
- 03 Al-powered humans
- 04 Trust

Introducing myself

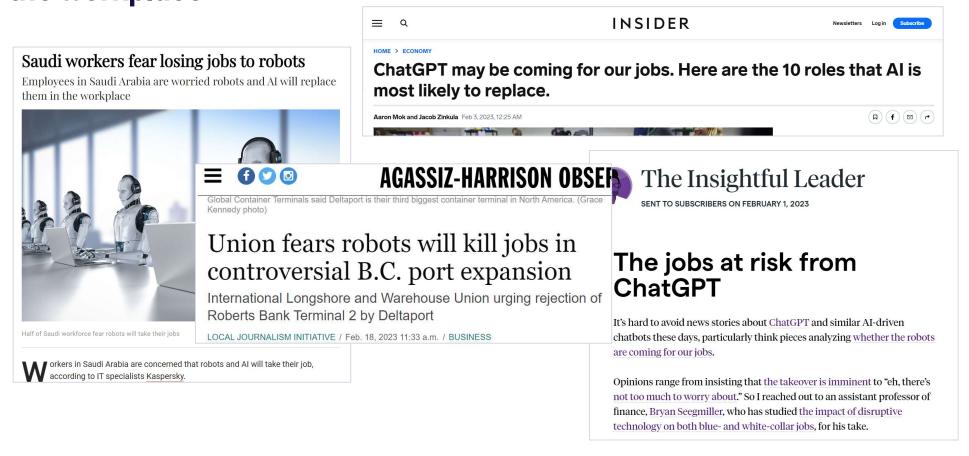


- Chief Data Officer & employee #1, bolttech
- >15 years of insurance experience
- Fellow of the CIA
- 3 boys: ages 5, 7 & 9

02

Al vs humans

There is growing concern that AI might replace humans in the workplace



Target case study: Statistics might hint at the truth, but...



- Predicting likelihood of milestone events to market specific items, in this case, pregnancy
- Algorithm identified pregnancy, coupons for relevant items were sent
- Human intervention & feedback crucial to finetune subtleties e.g.
 marketing without making customers feel overly scrutinized

Al on its own lacks context and understanding of human nature

ChatGPT plays chess



ChatGPT is a recently released v3.5 software that has the internet abuzz about what it can do as it can write a beautiful essay and even a poem

With words as my paint,

And a keyboard to create,

I craft a world of rhyme and verse,

A symphony of language, my universe.

Al has a long way to go before it can realistically replace human contextual thinking.

Humans and tools







Before

After







234567 * 8904 / 650 - 36 = ?





Technology - a tool that enables humans to do things more efficiently

03

Al-powered humans

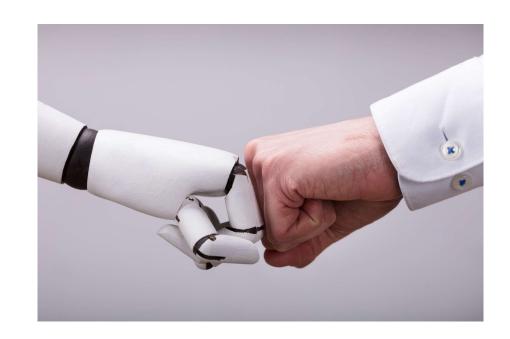
Al-powered humans at bolttech – Fraud detection

- Fraud is a key concern in the insurance industry
- Al / ML models assign a probability of potential fraud to a claim
- Claims with high fraud risk are followed-up by a human
- Humans must maintain integrity of the model:
 - · Checking if it is actually fraud
 - Ensuring no bias or drift creeps in
 - Discovering new fraud methods/approaches



Al-powered humans at bolttech – Customer analysis

- Al helps determine what a human needs
 - Flagging major life events and their impact on needs
 - Assessments of what other people have bought
- Human can help determine what a person wants
 - Balancing vacations and insurance
 - Personal preferences in risk tolerance



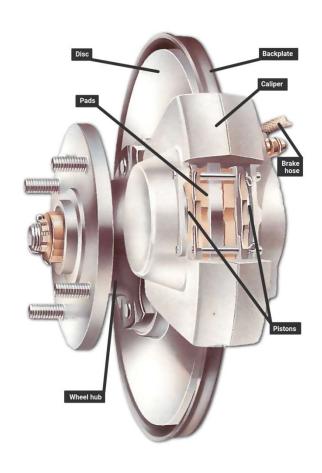
Al-powered humans at bolttech – IoT sensors

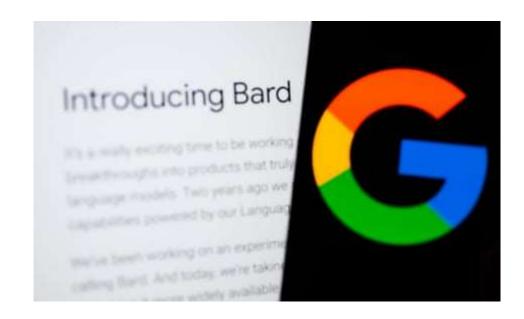
- Sensors gather immense amounts of data which can be used to customize insurance designs, improve pricing and reduce risk
- Customers now place sensors throughout their home, auto and companies
- The AI can help organize this data which the human can harvest to
 - Design usage-based products
 - Determine how to reduce claims for each event.
 - Train people with better habits



04Trust

Trust is the foundation of a useful tool







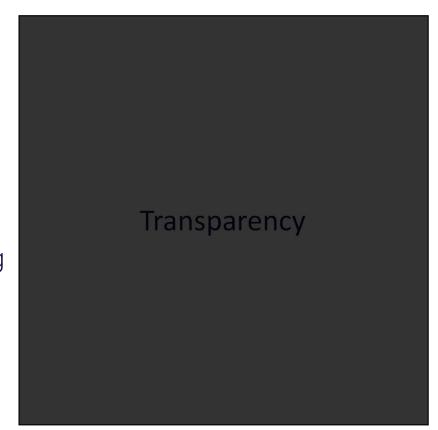


• Explainability:
Ensuring that AI
systems are
designed to provide
understandable
explanations for
their decisions and
actions in a humanreadable format.

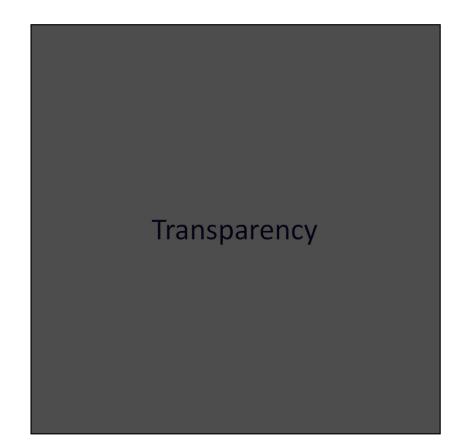


- Explainability
- Data governance:

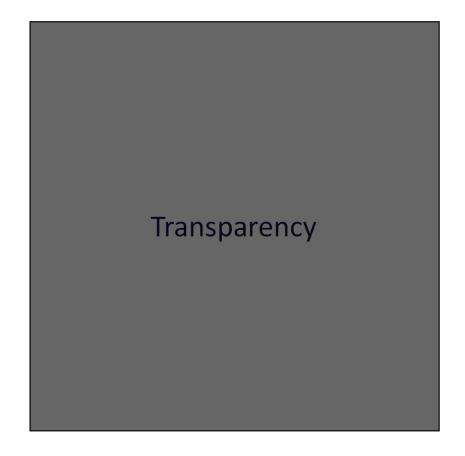
 Disclosing the type,
 quality, and sources
 of data used in
 training and testing
 Al systems, including
 any biases or
 limitations.



- Explainability
- Data governance
- Providing comprehensive documentation that describes the technical details, data sources, and algorithms used

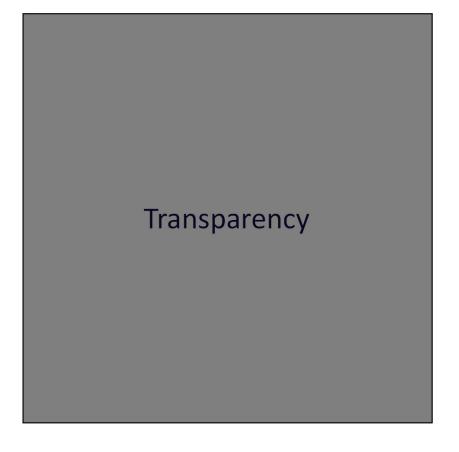


- Explainability
- Data governance
- Documentation



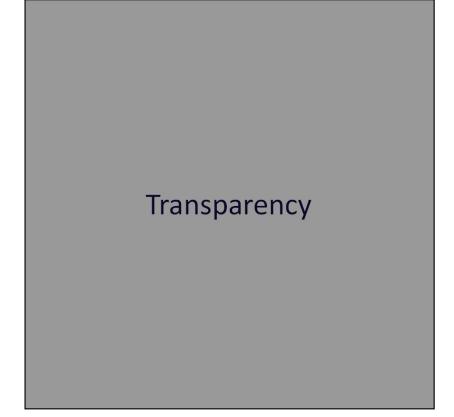
 Auditing and Validation: Conducting regular audits and validations of AI systems to ensure their accuracy, fairness, and compliance with established standards or regulations.

- Explainability
- Data governance
- Documentation



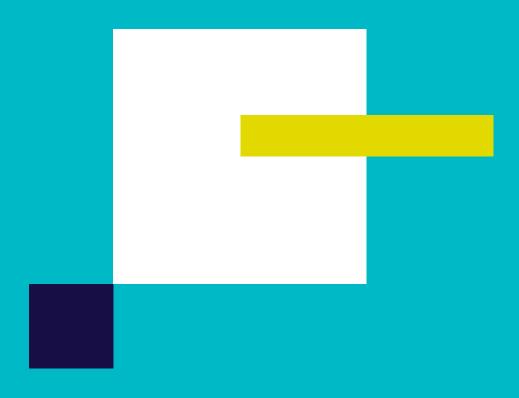
- Auditing and Validation
- Ethics: Al systems are designed and used in a manner that aligns with ethical principles, such as fairness, accountability, and respect for human values.

- Explainability
- Data governance
- Documentation



- Auditing and Validation
- Ethics

https://bolttech.io



THE POWER OF CONNECTION

bolttech.io C1 — Public

Classified as C1 - Public